



## TUBERCULOSIS INFORMATION

### - Treatment of Tuberculosis Infection (Preventive Therapy)

When taken as prescribed, isoniazid preventive therapy is highly effective in preventing latent tuberculosis (TB) infection from progressing to TB disease.

#### Who should receive preventive therapy?

The following persons should be given high priority for preventive therapy if they have positive skin test results, regardless of their age:

- persons known to have or suspected of having HIV infection (5 mm or greater of induration),
- persons who have been in close contact with someone who has infectious TB disease (5 mm or greater),
- persons whose skin test results converted from negative to positive within the past 2 years (10 mm or greater increase for persons <35 years old; 15 mm or greater increase for persons 35 years of age or older), including children <4 years old who have a positive skin test result (10 mm or greater),
- persons with abnormal chest radiographs who have never been treated for TB or who have been inadequately treated for TB (5 mm or greater),
- persons who inject drugs and who are HIV seronegative (10 mm or greater), and
- persons who have medical conditions that increase the risk for TB (10 mm or greater). These conditions include diabetes mellitus, prolonged corticosteroid therapy, immunosuppressive therapy, gastrectomy, some hematologic and reticuloendothelial diseases, end-stage renal disease, silicosis, and body weight that is 10% or more below ideal.

In addition, in the absence of any of the above risk factors, persons younger than 35 years old in the following groups should be evaluated for preventive therapy if their reaction to the tuberculin skin test is 10 mm or greater:

- foreign-born persons from countries where TB is common;
- medically underserved, low-income populations; and
- residents of long-term care facilities.

Preventive therapy should also be considered for persons who are younger than 35 years old, who have positive skin test results, and who have no risk factors for TB.

In addition, staff of facilities in which a person with infectious TB disease would pose a risk to large numbers of susceptible persons (e.g., health care facilities, correctional facilities, and nursing homes) should be evaluated for preventive therapy if they have a positive skin test result.

Persons who have a positive reaction to the tuberculin skin test should not be given preventive therapy until the possibility of TB disease has been ruled out. In addition, persons who are being considered for preventive therapy should be evaluated for medical contraindications, such as

- previous isoniazid-associated hepatic injury,
- history of severe adverse reactions to isoniazid, and
- acute or active liver disease.

Also, special precautions should be taken for some persons who are receiving preventive therapy.

Precautions are indicated for

- persons who are older than 35,
- persons who abuse alcohol,
- pregnant women,
- persons with chronic liver disease,
- persons with peripheral neuropathy, and
- persons who in the past have stopped using isoniazid because of adverse effects.

#### Regimens for Preventive Therapy

The usual preventive therapy regimen is 6 months of daily isoniazid, in a dosage of 10 milligrams per kilogram of body weight. The maximum daily dose is 300 milligrams. HIV-infected persons should receive 12 months of preventive therapy. Children younger than 15 should receive 9 months of preventive therapy. Persons who have a stable, abnormal chest radiograph can be treated with isoniazid and rifampin for 4 months, or they can be treated with 12 months of isoniazid alone.

For persons infected with a strain of *M. tuberculosis* that is resistant to isoniazid but susceptible to rifampin, CDC recommends the use of rifampin alone for preventive therapy.

#### Adverse Reactions

The major toxic effect of isoniazid is hepatitis. The risk for hepatitis increases with alcohol consumption. Isoniazid may also cause peripheral neuropathy. Persons at risk for neuropathy--for example, persons who abuse alcohol and persons with diabetes--should be given pyridoxine, or vitamin B-6, in conjunction with isoniazid preventive therapy.

Patients should be educated about the signs and symptoms of toxicity to isoniazid, and they should be monitored monthly by appropriately trained personnel. No more than a 1-month supply of medicine should be dispensed at any visit. If signs or symptoms of toxicity appear, isoniazid should be stopped immediately, and the patient should be reevaluated. Patients should not be given isoniazid preventive therapy if they cannot be monitored monthly.

#### For More Information

To order the following document, call (404) 639-1819.

CDC. The use of preventive therapy for tuberculous infection in the United States. *MMWR*. 1990;39(RR-8).

#### Available July 1, 1994:

American Thoracic Society. Treatment of tuberculosis and tuberculosis infection in adults and children. *Am J Respir Crit Care Med*. 1994;149:1359-1374.

For information about implementing CDC guidelines, call your state health department.



## PUBLIC COMMENT - TUBERCULOSIS FAX SYSTEM

For a limited time CDC is accepting public comment on the information services you used. We are particularly interested in the areas listed below. If you wish to comment, you may:

**FAX this sheet with your comments to: CDC-VIS/FAX (404) 639-1733, or**

Mail to: CDC, IRMO MS C-15, 1600 Clifton Road, N.E., Atlanta, GA 30333

1. You are

- ☐ health care professional  
☐ other

2. Fax sheet(s) you received:

- ☐ Tuberculosis (TB): General Information  
☐ TB Infection vs. TB Disease  
☐ Diagnosis of TB Infection (Tuberculin Skin Test) and TB Disease  
☐ Treatment of TB Infection (Preventive Therapy)  
☐ Treatment of TB Disease  
☐ Management of Persons Exposed to Multidrug-Resistant TB  
☐ BCG Vaccine  
☐ Infection Control  
☐ Screening for TB  
☐ TB Morbidity in the United States  
☐ Tuberculosis Educational Materials Order Form

3. Reason you requested fax sheet:

- ☐ for general information on topic  
☐ to answer specific question

If you had a specific question, please describe it:

4. The information met your needs.

- ☐ yes  
☐ no  
☐ partially

If you answered no or partially, please describe your unmet needs:

5. Suggestions for additional information sheets or for improving the system: